CLAIMS

1. A method of treatment of an existing papillomavirus (PV) infection which includes the step of administration of PV VLPs selected from the group consisting of PV L1 VLPs and PV L1/L2 VLPs to a patient suffering from the PV infection.

2. A method of treatment as claimed in Claim 1 wherein the PV infection is characterised by the presence of epithelial lesions.

3. A method of treatment as claimed in Claim 2 wherein the epithilial lesions are selected from the group consisting of palmar warts, planter warts, ano-genital warts, flat and planar warts of the skin and muscosal surfaces, CIN, equine sarcoid and replicating or vegetative PV infection.

4. A method of treatment as claimed in Claim 3 wherein the PV infection is genital warts caused by HPV 6, 11, 34, 39, 41-44 and 51-55.

5. A method of treatment as claimed in Claim 4 wherein the genital warts are caused by HPV 6 and HPV11.

6. A method of treatment as claimed in any preceding claim wherein the VLPs are produced by cloning the PV L1 gene into a suitable vector and expressing the corresponding conformational coding sequence for L1 in an eukaryotic cell transduced by the vector.

7. A method of treatment as claimed in Claims 1-5 wherein the VLPs are produced by cloning the PV L1 and L2 genes into a suitable vector and expressing the corresponding conformational coding sequence for L1 and L2 in an eukaryotic cell transduced by the vector.

8. A method as claimed in Claim 6 or 7 wherein the L1 or L1 and L2 genes are inserted into an expression vector containing flanking sequences to form a gene construct and the resulting recombinant DNA is co-transfected with wild type baculovirus DNA into a permissive cell line.

9. A method as claimed in Claim 6 or 7 wherein the cell line is Sf9 insect cells and the expression vector is a baculovirus expression vector.

10. A method as claimed in Claim 8 wherein the cell line is a procaryotic cell line.

11. A method as claimed in any preceding claim wherein the concentration of PV VLPs administered to the patient is 0.5-20 µg.

12. A method as claimed in Claim 11 wherein the concentration is 1-10 µg.

13. A method of treatment as claimed in Claim 1 wherein the VLPs exclude adjuvant.

~~13.~~ 14 A method of treatment as claimed in Claim 11 or 12 wherein dosages of PV VLPs are given 3-6 times over a period of 8-16 weeks.

R126

~~14.~~ 15 A method of treatment as claimed in Claim 11 wherein dosages of PV VLPs are 3-6 times over a period of 2-4 weeks.

~~15.~~ 16 A method of immunization against HPV11 infections by administration of HPV6 VLPs to a patient.

~~16.~~ 17 A method as claimed in Claim 15 wherein HPV6b VLPs are administered to the patient.

~~17.~~ 18 A method as claimed in Claim 15 or 16 wherein the

concentration of HPV6 VLPs are 0.5-20 µg.

19 A method as claimed in Claim 17 wherein the concentration of HPV6 VLPs are 1-10 µg.

20 A method as claimed in Claim 17 or 18 wherein dosages of HPV6 VLPs are given 3-6 times over a period of 8-16 weeks.

21 A method as claimed in Claim 17 or 18 wherein dosages of HPV6 VLPs are given 3-6 times over a period of 2-4 weeks.

22 A method of immunization against HPV6 infections by administration of HPV11 VLPs to a patient.

23 A method of immunization as claimed in Claim 21 wherein the concentration of HPV11 VLPs is 0.5-20 µg.

24 A method of immunization as claimed in Claim 22 wherein the concentration of HPV11 VLPs is 1-10 µg.

25 A method of immunization as claimed in Claim 22 or 23 wherein dosages of HPV11 VLPs are given 3-6 times over a period of 8-16 weeks.

26 A method of immunization as claimed in Claim 22 or 23 wherein dosages of HPV11 VLPs are given 3-6 times over a period of 2-4 weeks.

27 A method of treatment of an existing PV infection which includes the step of administration of PV VLPs without adjuvant to a patient suffering from the PV infections.

28 A method of treatment as claimed in Claim 27 wherein the PV VLPs are chimeric.

28. 29 A method of treatment as claimed in Claim 26 wherein the PV VLPs comprise E protein.

29. 30 A method of treatment as claimed in Claim 1 wherein the PV VLPs include an adjuvant.

30. 31 A method of treatment as claimed in Claim 29 wherein the adjuvant is one that induces cellular responses.

31. 32 A method of treatment as claimed in Claim 30 wherein the adjuvants are selected from the group consisting of (1) lipid A and derivatives, (2) Quillaia saponins and derivatives, (3) mycobacteria and components or derivatives therefrom and (4) IL 12, GMCSF, other Th1 inducting cytokines and (5) ozidized mannan and analogues thereof.